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Dicerna Pharmaceuticals Appoints Leading Experts to Scientific Advisory Board

Watertown, Mass., October 15, 2008 –Dicerna Pharmaceuticals, Inc. (www.dicerna.com), a second generation RNA interference company developing novel therapeutics utilizing proprietary Dicer Substrate Technology™, announced today the appointment of leading experts to its Scientific Advisory Board (SAB). The newly appointed SAB will serve as a strategic asset to the company as it continues to develop novel RNAi-based therapies that use an earlier step in the gene silencing process, namely the engagement of the enzyme Dicer, which is a natural initiation point for the RNAi cascade.

“Dicerna has appointed an SAB of world-renowned experts to guide the Company in our continued efforts to identify and develop RNAi-based drugs. Working with the SAB, our efforts are focused on identifying the most promising targets, optimizing our compounds and our proprietary drug delivery systems, and advancing our innovative therapeutics toward the clinic,” commented James Jenson, Ph.D., chief executive officer and co-founder, Dicerna Pharmaceuticals. “Our SAB brings luminaries in the field of RNAi research together with clinical and scientific experts in oncology, virology and genetics, and their combined expertise and insights will be a tremendous asset as Dicerna continues to develop RNAi-therapies in the areas of oncology, metabolic diseases and hepatitis C infection (HCV).”

Dicerna’s SAB features several renowned scientific experts within the fields of RNAi, oncology and infectious diseases, including:

- John Rossi, Ph.D., chair of the SAB, scientific co-founder of Dicerna, professor in the Division of Molecular Biology and dean, Graduate School of Biological Sciences at City of Hope's Beckman Research Institute;
- Mark Behlke, M.D., Ph.D., Dicerna scientific co-founder, vice president of molecular genetics and biophysics, and chief scientific officer at Integrated DNA Technologies;
- Carlo Croce, M.D., professor of internal medicine, chair of Molecular Virology, Immunology & Medical Genetics, and director, Human Cancer Genetics Program, Ohio State University;
- Frank McCormick, Ph.D., FRS, distinguished professor and director, UCSF Helen Diller Family Comprehensive Cancer Center & Cancer Research Institute; and,

- Thomas M. Roberts, Ph.D., co-chair, Department of Cancer Biology, Dana-Farber Cancer Institute and professor of pathology, Harvard Medical School.

Dr. Rossi added, “As a scientific co-founder of Dicerna, it is gratifying to see that the Company, with the added support and expertise from the SAB, is making significant progress toward achieving the vision of drug development and meaningful therapeutic applications of our dicer substrate technology. I look forward to working closely with the new SAB members to continue advancing our RNAi-based therapies toward the clinic.”

Background on SAB Members

John Rossi, Ph.D., Dicerna SAB chair and scientific co-founder, professor in the Division of Molecular Biology and dean, Graduate School of Biological Sciences at City of Hope's Beckman Research Institute

Dr. Rossi is a world-renowned expert in the field of RNAi and is credited with discovering and patenting the critical role of dicer substrate RNAs in the gene silencing pathway. He is also the co-inventor of Dicerna's Dicer Substrate Technology. Dr. Rossi currently serves as the president of the Oligonucleotide Therapeutics Society and is co-founder of Calando, an siRNA delivery company. Dr. Rossi was a postdoctoral fellow in biology and medicine at Brown University from 1976 to 1979. He earned his Ph.D. and M.S. in microbial genetics from University of Connecticut, and his B.A. in biology from the University of New Hampshire.

Mark Behlke, M.D., Ph.D., Dicerna scientific co-founder, vice president of molecular genetics and biophysics, and chief scientific officer at Integrated DNA Technologies

Dr. Behlke has been vice president of molecular genetics and biophysics at Integrated DNA Technologies (IDT) since 1996. Dr. Behlke is the co-inventor of Dicerna's Dicer Substrate Technology. Previously, Dr. Behlke was a HHMI physician postdoctoral fellow at the WIBR in the laboratory of Dr. David Page, and a resident physician in internal medicine at Brigham and Women's Hospital, Boston. He received his M.D. and Ph.D. degrees from Washington University, St. Louis, where he studied immunogenetics in the laboratory of Dr. Dennis Loh. He received his B.S. degree from the Massachusetts Institute of Technology.

Carlo Croce, M.D., professor of internal medicine, chair of Molecular Virology, Immunology & Medical Genetics, and director, Human Cancer Genetics Program, Ohio State University

Dr. Croce is a member of the National Academy of Sciences who formerly served as director of Kimmel Cancer Institute/Kimmel Cancer Center at Jefferson Medical College, Thomas Jefferson University in Philadelphia. His research is focused on early molecular changes in genes that lead to cancer and how those changes might serve as targets for new treatments and preventive agents, resulting in the identification of several mutated genes involved in leukemias, lymphomas and other cancers. His research led to the first mouse model for chronic lymphocytic leukemia (CLL), the most common adult leukemia in the Western Hemisphere. He has authored over 750 scientific publications. Dr. Croce received his M.D. from the University of Rome, Italy.

Frank McCormick, Ph.D., FRS, distinguished professor, director, UCSF Helen Diller Family Comprehensive Cancer Center & Cancer Research Institute

Dr. McCormick is a distinguished cancer researcher focused on signal transduction pathways in cancer cells, and ways of treating cancer based on these pathways. He currently directs the UCSF Helen Diller Family Comprehensive Cancer Center & Cancer Research Institute, as well as serving as professor of microbiology and immunology. Prior to UCSF, Dr. McCormick was founder and chief scientific officer of Onyx Pharmaceuticals. He is a Fellow of the Royal Society, and has authored over 250 papers in scientific journals. Dr. McCormick received his B.S. in biochemistry from the University of Birmingham, England, and his Ph.D. from the University of Cambridge, England.

Thomas M. Roberts, Ph.D., co-chair, Department of Cancer Biology, Dana-Farber Cancer Institute and professor of pathology, Harvard Medical School

Dr. Roberts' laboratory has played a seminal role in developing the techniques used to study signaling downstream from tyrosine kinases. Currently, his laboratory focuses on how kinases are involved in cancer, new ways to measure kinase activity in tumors and developing model systems to study kinases in tumors using diverse organisms. Dr. Roberts has been a member of the Dana Farber Cancer Institute faculty since 1981. Using viral oncogenes as a base, his laboratory pioneered research on the two key signaling components: PI3 kinase and Raf-1. Dr. Roberts received his Ph.D. from Harvard University, where he also completed a postdoctoral fellowship.

About RNAi

First described in plants and then in worms, flies and higher organisms, RNAi works differently in mammals because of the activity of Dicer, a key enzyme involved in the processing of double-stranded RNA into siRNA. In humans, Dicer optimally processes double-stranded RNA oligonucleotides of 25 to 30 base pairs, resulting in a five-to-10-fold more potent activity and longer duration of action.

About Dicerna

Dicerna Pharmaceuticals is a private, venture-backed RNAi-focused biopharmaceutical company developing novel therapeutic agents in multiple disease areas based on its proprietary Dicer Substrate Technology platform. Dicerna is developing novel RNAi-based therapies, and related drug delivery systems, that use an earlier step in the gene silencing process, namely the engagement of the enzyme Dicer, which is a natural initiation point for the RNAi cascade. This approach results in the knockdown of expression of a targeted gene in a way that is highly selective and specific, and demonstrates greater potency and longer duration of action than other RNAi approaches. The Dicer Substrate Technology is based on intellectual property that is both broadly enabling and distinct from other IP in the field. Dicerna is based in Watertown, Massachusetts. For more information, please visit www.dicerna.com.

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